

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1-17 (cancelled).

18. (New) A device for applying a fluid medium to a substrate, comprising:

a capillary tube or a needle having an end;

a first arrangement configured to one of: i) cause the fluid medium to exit from the end of the capillary tube in a form of a droplet, or ii) cause the fluid medium to adhere to the end of the needle in a form of a droplet;

a second arrangement configured to vary a distance of the end of the capillary tube or the needle to the substrate; and

at least one image recording device and at least one image processing device assigned to the at least one image recording device, a time of transfer of the droplet, from the capillary tube or the needle to the substrate being detected by the at least one image recording device when the distance of the end of the capillary tube or the needle to the substrate is reduced.

19. (New) The device as recited in claim 18, wherein the image recording device and the image processing device are configured so that, immediately before the transfer of the droplet, a meniscus height or a shape of the droplet can be determined.

20. (New) The device as recited in claim 19, wherein the image recording device and the image processing device are configured so that at least one of: i) contactless detection of the transfer of the droplet, and ii) immediately before the transfer, contactless determination of the meniscus height or the shape of the droplet, can be performed.

21. (New) The device as recited in claim 18, wherein the image recording device includes at least one of: i) a camera, ii) a light barrier, ii) a fiber-optic sensor, and iv) an arrangement to detect or generate and detect a sound field.

22. (New) The device as recited in claim 18, wherein the image recording device and the image processing device are configured so that the distance of the end of the capillary tube or the needle to the substrate or the distance of the droplet to the substrate can be detected.

23. (New) The device as recited in claim 19, wherein the image recording device and the image processing device are configured so that a point in time when the droplet is transferred can be detected with the aid of a differential image method or by monitoring the shape change of the droplet when the droplet is transferred.

24. (New) The device as recited in claim 18, wherein the substrate is reflective, and the image recording device and the image processing device are configured so that a point in time of the transfer of the droplet can be detected by determining a detected characteristic surface which changes at the time of the transfer.

25. (New) The device as recited in claim 18, wherein the image recording device and the image processing device are configured so that, before the transfer, a first surface defined by at least a part of the droplet can be detected, and at the time of or after the transfer, a second surface defined by at least the part of the droplet and a mirror image of the droplet can be detected.

26. (New) The device as recited in claim 25, wherein the image recording device and the image processing device are further configured so that a part of the capillary tube with needle can be detected.

27. (New) The device as recited in claim 18, wherein the image recording device and the image processing device are configured so that a change in a width of the droplet or of a meniscus, beyond a threshold value, can be detected at the time of the transfer.

28. (New) The device as recited in claim 18, wherein the image recording device and the image processing device are configured in such a way that a change in a surface in a work window beyond a threshold value, can be detected at the time of the transfer.

29. (New) The device as recited in claim 18, wherein the image recording device has a camera and an associated rotatable mirror system, with the aid of which the droplet can be detected at different angles to the substrate.

30. (New) The device as recited in claim 18, further comprising:
a reference marker connected to the capillary tube or the needle.

31. (New) The device as recited in claim 18, wherein the image recording device has at least one optical fiber.

32. (New) The device as recited in claim of 29, wherein the image recording device has two cameras which detect the droplet immediately before the transfer and detect the droplet at the time of the transfer at different angles to the substrate.

33. (New) The device as recited in claim 18, wherein the capillary tube is part of a dispensing device.

34. (New) The device as recited in claim 33, wherein the dispensing device is a piston dispense.

35. (New) The device as recited in claim 18, wherein the image recording device includes a camera having a telecentric lens.

36. (New) A method for applying a fluid medium to a substrate, comprising:
causing a fluid medium in the form of a droplet to one of exit a capillary at an end, or adhere to an end of a needle;
detecting, without contact, a time of transfer of the droplet to a substrate using image processing, when a distance from the end of the capillary tube or the needle to the substrate changes.